

What is claimed is:

1. A method of manufacturing a semiconductor device,  
comprising:

5 a step of forming an oxidation proof layer including  
an aperture on a silicon substrate;

a step of forming a field oxide for a device  
isolation thermally oxidizing silicon at the aperture;

10 a step of depositing a protective layer thicker than  
a thickness of said oxidation proof layer on said  
oxidation proof layer and on said field oxide, said  
protective layer being composed of such a selective  
removable material as to establish a condition under which  
said oxidation proof layer is selectively removed;

15 a step of making said protective layer residual on  
only the surface of said field oxide by removing a part of  
said protective layer deposited in said depositing step  
till the surface of the said oxidation proof layer is  
exposed; and

20 a step of removing said oxidation proof layer.

2. A method of manufacturing a semiconductor device  
according to claim 1, wherein said protective layer is  
composed of polysilicon.

3. A method of manufacturing a semiconductor device according to claim 1 or 2, wherein said step of removing the part of said protective layer is a step of executing a polishing process based on CMP (Chemical Mechanical  
5 Polishing).

4. A semiconductor device comprising:  
a field oxide for a device isolation; and  
a layer formed on the surface of said field oxide,  
10 said layer being composed of such a selective removable material as to establish a condition under which a silicon nitride layer is selectively removed.

5. A semiconductor device according to claim 4,  
15 wherein said selective removable material is polysilicon.